

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 to 92. (Cancelled)

- 93.** (New) An automatic mirror position adjustment system for a vehicle, comprising:
- a)** at least one mirror movably mountable to said vehicle;
 - b)** a turning sensor mountable to said vehicle and adapted for generating input signals responsive to rotations of said vehicle about at least two orthogonal axes;
 - c)** a control unit operatively connected to said turning sensor and adapted for generating output signals responsive to said input signals;
 - d)** a driving mechanism operatively connected to said control unit and coupled to the or each said at least one mirror for rotating the or each mirror about said at least two orthogonal axes in response to said output signals.
- 94.** (New) A system according to claim 93, wherein said turning sensor is adapted for generating input signals responsive to one of :
- a)** rolling and pitching rotations of said vehicle; or
 - b)** yawing, pitching and rolling rotations of said vehicle.
- 95.** (New) A system according to claim 93, wherein said turning sensor is gyroscope-based.

96. (New) A system according to claim 94, wherein said turning sensor comprises a accelerometer arrangement capable of measuring accelerations of said vehicle in said at least two axes coupled to an angular rate sensor arrangement capable of measuring rotation rate of said vehicle in said at least two axes.
97. (New) A system according to claim 94, wherein said driving mechanism is adapted for rotating the or each mirror about in three orthogonal axes including said at least two axes.
98. (New) A system according to claim 94, wherein said control unit is adapted to provide said output signals according to predetermined criteria.
99. (New) A system according to claim 98, wherein said control unit provides said output signals to said driving mechanism such that said driving mechanism provides a rotation to said corresponding mirror in each said axis in directions opposed to the rotation of the said vehicle about each said axis, respectively.
100. (New) A system according to claim 99, wherein said control unit is adapted for providing output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path.
101. (New) A system according to claim 99, wherein said control unit is adapted for providing output signals to said driving mechanism for pitching said at least one mirror to a position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along an inclined path.
102. (New) A system according to claim 99, wherein said control unit is adapted for providing output signals to said driving mechanism for rolling said at least one mirror to

a position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a banked path.

103. (New) A system according to claim 94, further comprising an interface unit operatively connected to said control unit, wherein said interface unit is adapted for instructing said control unit to provide output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path.
104. (New) A system according to claim 103, wherein said interface unit is adapted for setting and storing said default positions for a plurality of users.
105. (New) A system according to claim 94, wherein said control unit is adapted for selectively providing output signals responsive to a predetermined input, wherein said driving mechanism to pan the or each mirror through a predetermined angular path about said at least one said axis in response to said output signals.
106. (New) A system according to claim 105, wherein said angular path provides a yawing rotation to said at least one mirror.
107. (New) A system according to claim 105, wherein angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.
108. (New) A system according to claim 106, wherein said angular path includes a rotation of a corresponding said mirror inboard towards said vehicle and outboard away from said vehicle.
109. (New) A automatic mirror panning system for a vehicle, comprising:
- a) at least one mirror movably mountable to said vehicle;

- b) a control unit adapted for generating output signals responsive to a predetermined input signal;
 - c) a driving mechanism operatively connected to said control unit and coupled to the or each said at least one mirror for panning the or each mirror through a predetermined angular path about said at least one axis in response to said output signals.
110. (New) A system according to claim 109, wherein angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.
111. (New) A system according to claim 109, wherein said predetermined input signal is provided via an interface unit operatively connected to said control unit,
- wherein said interface unit is adapted for enabling a user to selectively activate or deactivate said system, and wherein said interface unit is further adapted for instructing said control unit to provide output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path, when said system is deactivated.
112. (New) An automatic mirror position adjustment method for a vehicle, comprising:
- a) providing at least one mirror movably mountable to said vehicle;
 - b) sensing rotation of said vehicle about at least two orthogonal axes and generating input signals responsive to said rotation;
 - c) generating output signals responsive to said input signals;

- d) rotating the or each mirror about said at least two orthogonal axes in response to said output signals.
113. (New) A method according to claim 112, wherein said input signals are generated responsive to one of :
- a) rolling and pitching rotations of said vehicle; or
 - b) yawing, pitching and rolling rotations of said vehicle.
114. (New) A method according to claim 113, wherein said rotation is sensed via an accelerometer arrangement capable of measuring accelerations of said vehicle in said at least two axes coupled to an angular rate sensor arrangement capable of measuring rotation rate of said vehicle in said at least two axes, and wherein said accelerometer arrangement measures accelerations of said vehicle in three orthogonal axes including said at least two axes.
115. (New) A method according to claim 114, wherein said angular rate sensor measures angular rate of said vehicle about three orthogonal axes including said at least two axes.
116. (New) A method according to claim 115, further comprising the step of integrating angular rate about each axis provided by said angular rate sensor to provide raw angles about each axis, and inferring tilt angle about each axis from acceleration measurements provided by said accelerometer arrangement, and forcing the raw angles to match the tilt angles for each axis over a predetermined time period.
117. (New) A method according to claim 113, comprising the step of rotating the or each mirror about three orthogonal axes including said at least two axes.

118. (New) A method according to claim 113, wherein said output signals are provided according to predetermined criteria.
119. (New) A method according to claim 118, wherein said mirror is rotated about each said axis in a direction opposed to the rotation of the said vehicle about each corresponding said axis, respectively, responsive to said output signals.
120. (New) A method according to claim 113, further comprising selectively providing output signals responsive to a predetermined input, wherein the or each mirror is panned through a predetermined angular path about said at least one said axis in response to said output signals.
121. (New) A method according to claim 120, wherein angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.
122. (New) A automatic mirror panning method for a vehicle, comprising:
- a) at least one mirror movably mountable to said vehicle;
 - b) generating output signals responsive to a predetermined input signal;
 - c) panning the or each mirror through a predetermined angular path about said at least one axis in response to said output signals.
123. (New) A method according to claim 122, wherein angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.